

**Appendix B.** Summary of findings and design selection guidelines.

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<b>Design/Feature</b>	<b>Potential Advantages and Disadvantages</b>
Wide or Channel	<p>Wheelchair users expressed a preference for singlewide platform ramps (they could be used more easily and quickly).</p> <p>Caregivers tended to prefer channel ramps (they could be handled more easily).</p>
Folding, Telescopic, and Fixed	<p>Caregivers preferred folding and telescopic ramps (they were easier to store in the vehicle).</p> <p>Fixed ramps were popular with powered-wheelchair users (they were more rigid).</p> <p>Difficulties were experienced in the handling of both folding and telescopic ramps (they were too large or stiff to handle and the sections of some telescopic ramps extended too easily).</p>
Length	<p>The length of a ramp combined with the vehicle sill height, results in the gradient for loading and unloading.</p> <p>The gradient was found to affect the ease and safety of loading wheelchairs in both the professional and caregiver trials.</p> <p>Many caregivers commented that longer ramps might be impractical if used to access a vehicle (due to the space required for storage).</p> <p>Shorter ramps may also be preferred by people who use self-propelling wheelchairs (these require a shorter burst of energy).*</p>
Width	<p>All the wide ramps provided sufficient space to accommodate the variety of wheelchairs used.</p> <p>The width of the channel ramps ranged from 150–196 mm, and in some cases, this was inadequate (the diameter of the front castor of a standard wheelchair was greater than 150 mm).</p> <p>Wider channel ramps would be required, if needing to load a wheelchair with pneumatic tires.</p>
Weight	<p>The individual section weights of the ramps varied from 5.8–23.2 kg, with wide ramps generally weighing the most.</p> <p>Lighter ramps were preferred by caregivers</p>
Handles	<p>Caregivers were able to carry ramps more easily if they were fitted with handles.</p>

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\*Sweeney GM, Harrison RA, Clarke AK. Portable ramps for wheelchair users—an appraisal. *Int Disabil Stud.* 1989;11:68–70.